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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,214	04/19/2004	Brian T. Holland	7774	2941
49459	7590	09/16/2009		
NALCO COMPANY 1601 W. DIEHL ROAD NAPERVILLE, IL 60563-1198			EXAMINER METZMAIER, DANIEL S	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 09/16/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/827,214

**Applicant(s)**

HOLLAND ET AL.

**Examiner**

Daniel S. Metzmaier

**Art Unit**

1796

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 8, 10-29 and 32-37 is/are pending in the application.
- 4a) Of the above claim(s) 12-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8, 10, 11 and 32-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1, 8, 10-29 and 32-37 are pending.

#### ***Election/Restrictions***

1. Applicant's election of Group I, claims 1-11 and 30-31, now claims 1, 8, 10-11 and 32-33, in the reply filed on 22 January 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 12-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 22 January 2007.

This application contains claims 12-29 drawn to an invention nonelected in the reply filed on 22 January 2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action.

#### ***Claim interpretation***

2. The claims are drafted in product-by-process format. Attention is directed to MPEP 2113 for claim analysis of product-by-process claim limitations. Copolymerized as now claimed has basis at page 9, lines 15 et seq, discloses the term copolymerized and is characterized as a heel solution of silicic acid with a metallic cation. Said materials are further characterized as having a "metal-silicate lattice microstructure". Applicants (page 2, lines 29-30) characterize the colloidal particles as amorphous and spherical in shape, which may be further processed to produce crystalline structure.

Two structures appear to be set forth as the "metal-silicate lattice microstructure" and the macrostructure as amorphous or crystalline, wherein the microstructure results from the presence of the metal cation formation with the silicic acid to form the colloidal particles.

Clearly the claims are not limited to amorphous materials, including the independent claims since the claims recite open transitional language, i.e., "comprising", and further processing may render the materials crystalline. See claims 36 and 37.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 8, 10-11 and 32-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The basis for the limitation to "covalently copolymerized" has not been provided and the examiner is unable to find appropriate basis in the original specification for said limitations. Whether the metal is incorporated into the silicate network is not basis for the terms "covalently copolymerized". Applicants fail to provide any testing means, basis in the literature or prior art of how the covalent bonds of the "covalently copolymerized" materials are determined.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 8, 10-11 and 32-37 are rejected under 35 U.S.C. 102(a) as being anticipated by Cundy et al, "Some observations on the preparations and properties of colloidal silicalites. Part I: Synthesis of colloidal silicalite-1 and titanossilicalite-1 (TS-1)", Microporous and Mesoporous Materials, 66 (2003), pages 143-156. Cundy et al (page 146, 2.2 Preparation of TS-1sols) discloses the preparation of titanossilicalite-1 sols with TPAOH having 6 mole % of titanium metal and discloses as little as 1 mole % titanium metal. The 1 mole % equates to less than 2 wt % of metal based on silica. The materials would have been expected to be inherently spherical since the said materials have not been otherwise stated. Since claim 1 clearly contemplates the further processing of the materials to render them at least somewhat crystalline, it is reasonable to conclude that the claims are open to both amorphous and crystalline materials.

***Response to Arguments***

7. Applicant's arguments filed 19 May 2009 have been fully considered but they are not persuasive.

8. Applicants (page 9) assertions regarding the rejection under 35 USC 112, 1<sup>st</sup> paragraph, have not been deemed persuasive since the argument asserts the specification describes the invention. Said assertions and the descriptions are conclusions that applicants provide no basis for in fact. Said rejection is deemed proper and has been maintained.

9. Applicants (pages 9 and 10) assert the Cundy reference is obviated by the declaration under 35 USC 1.131. This has not been deemed persuasive since applicants' evidence is illegible and indecipherable. Applicants have provide no explanation of what said evidence represents and a type-written form of what is present on the exhibit pages. The rejection is deemed proper and has been maintained and the Declaration is not probative therefor.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. EP 109060, published in 1984, discloses the coprecipitation during the formation of silicalite-1 with chromium metal salts as well as alkaline earth metals. Specific attention is directed to the instant specification at page 4, lines 23-24; page 5, lines 20-21; page 8, lines 1-2; page 9, lines 23-26; and particularly page 16, line 4 et seq to Synthesis Procedure Three.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Daniel S. Metzmaier/  
Primary Examiner, Art Unit 1796**

DSM